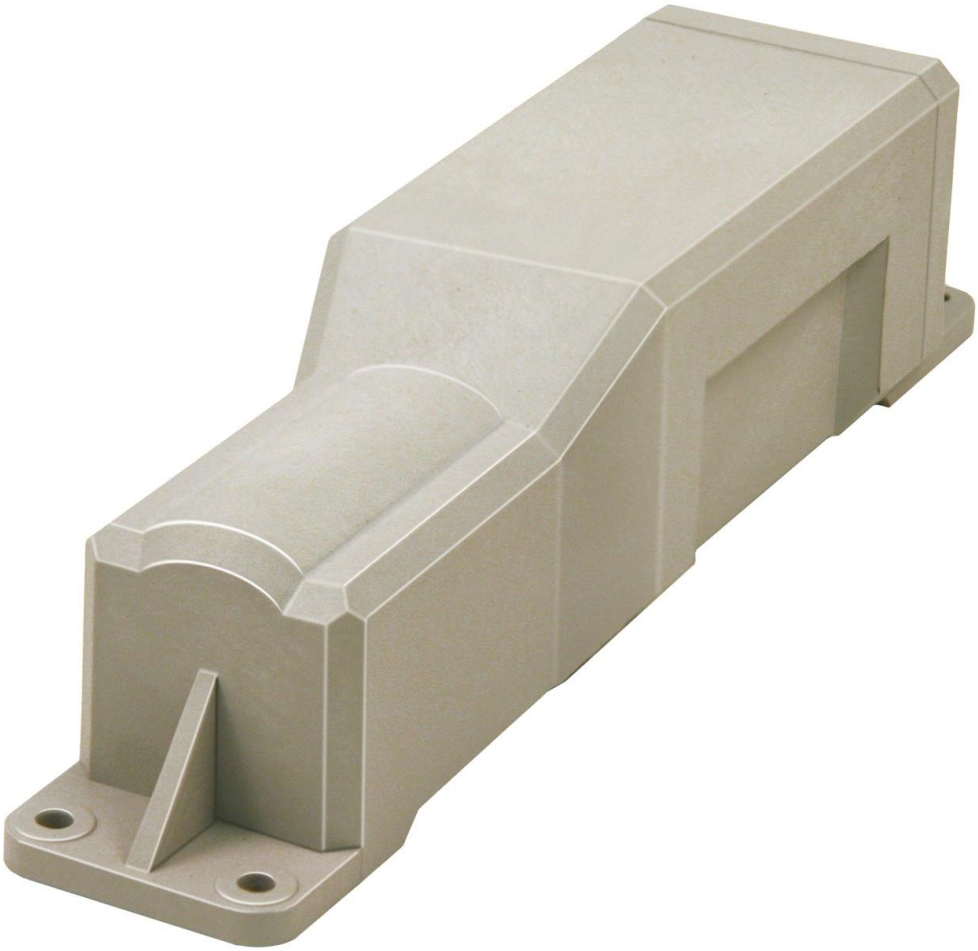
NAVMAN WIRELESS

Qtanium 100

Installation Manual



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It is the Owner's sole responsibility to install and use the Qtanium 100 (the Product) in a manner that will not cause accidents, personal injury or property damage. For the purpose of this notice, "Owner", "you" and "your" means the party (including any person authorized by that party to use and / or install the Product) that has either: (a) purchased the Product; or (b) leased the Product from Navman Wireless or its related companies. The Owner of this Product is solely responsible for observing safe driving practices.

The choice, location and installation of all components of the Product is critical. If installation is not correct, the Product may not perform at its designed potential or specifications. Ensure that any mounting holes that need to be cut in the vehicle will not weaken the vehicle structure or compromise the safety of the vehicle or its occupants. If in doubt, consult the vehicle manufacturer, or your Navman Wireless dealer.

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EMC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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1 Introduction

1.1 Overview

The Navman Wireless Qtanium 100 is self-contained, battery-powered, asset tracker. It contains an internal GPS receiver and an internal cellular antenna that eliminate the need for external antennas.

The Qtanium 100 collects accurate operational and location information about the asset (such as a trailer) and transmits this data to the OnlineAVL software.

The Qtanium 100 can be installed on an asset using one of the following methods:

- screws,
- bolts,
- magnets.

The choice of mounting location and the mounting method depends upon the type of asset.

1.2 Audience

This Installation Manual is written for a professional vehicle technician.

Navman Wireless welcomes your feedback. To contact us or visit our website, see section 7.

2 Qtanium 100 Hardware

2.1 Box Contents

The box contains:

- 1 Qtanium 100 (with the internal battery in place),
- 8 flat washers,
- 4 self-tapping mounting screws (Hex washer head),
- 4 nuts (with Nylock insert),
- 4 bolts.

2.2 Optional Components

An optional Magnetic Mounting Kit is available. This contains:

- 1 lanyard 45 cm (18”),
- 1 lanyard quick link,

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3 Qtanium 100 Mounting Locations

IMPORTANT NOTICE

The Qtanium 100 contains an accelerometer that detects movement. It is critical that the Qtanium 100 is mounted securely and cannot move independently of the asset OR vibrate off its mounting location. Insecure mounting may result in false or incorrect vehicle movement alerts.

The installation is considered to be **permanent** as the firmware can be updated without removing the Qtanium 100 from the asset.

Always comply with the following important installation information:

- Ensure that the chosen mounting location will protect the Qtanium 100 from damage when stacking the chassis or operating the asset.
- Optimal GPS performance will be achieved if the mounting location provides the Qtanium 100 with a clear view of the sky.
- If the mounting location is on the chassis or under the trailer, mount the Qtanium 100 so that it faces UP or DOWN to ensure optimal GPS performance.

4 Installation Procedure

4.1 Install the Qtanium 100

IMPORTANT NOTICE

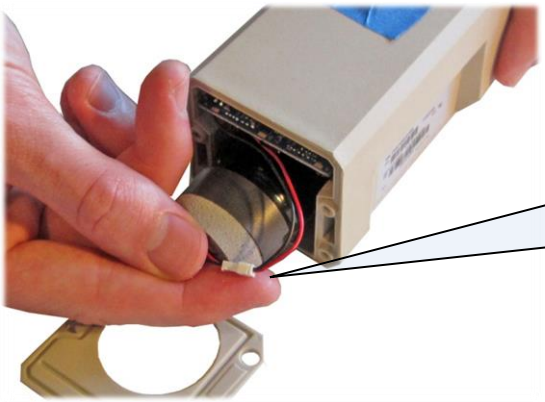
Ensure that any holes drilled for the installation will not weaken the structure of the asset or compromise the safety of the asset or its occupants. If in doubt, consult the manufacturer.

1. Record the MSN (Module Serial Number) shown on the Qtanium 100 label, and the asset number.
2. Select the mounting location.
3. Mount the Qtanium 100 using one of the following three methods:
   - SCREWS: Use the 4 mounting screws and 4 flat washers. Position each flat washer between the screw head and the Qtanium 100 housing.
   - BOLTS: Use the 4 bolts, 8 flat washers, and 4 nuts. Position a flat washer between each bolt head and the Qtanium 100 housing, and another flat washer between each nut and the asset.
   - MAGNETS: Use the optional Magnetic Mounting Kit. Each magnet MUST be in contact with the mounting surface. At one end of the Qtanium 100, position a flat washer over each magnet screw, between each nut and the Qtanium 100 housing. At the other end, position the lanyard tab over the 2 magnet screws then secure using 2 flat washers and 2 nuts. Wrap the lanyard around or through the chassis or a locking rod then attach both end loops to the quick link. Attach the quick link to the remaining hole in the lanyard tab.
4. Remove the activation magnet (under the blue tape) from the Qtanium 100. This automatically activates event reporting and the Qtanium 100 sends an event to OnlineAVL.
5. Keep the activation magnet so that event reporting can be disabled if the Qtanium 100 is removed from the asset.
6. Position the asset outside, in a location that has a good view of the sky and good cellular reception.
7. EITHER use the mobile OnlineAVL application on your phone to check that the Qtanium 100 has established contact OR call OnlineAVL Support with the following details and ask them to associate the Qtanium 100 with the asset number:
   - Customer name,
   - Qtanium 100 MSN,
   - Asset number and asset VIN.

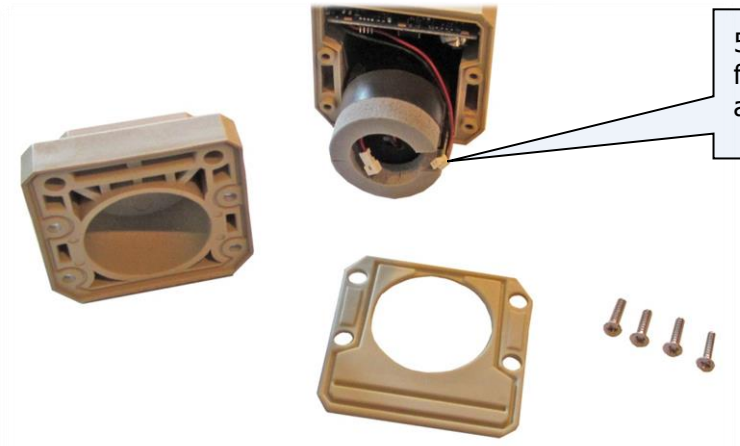
5 Maintenance

5.1 Battery Replacement Procedure

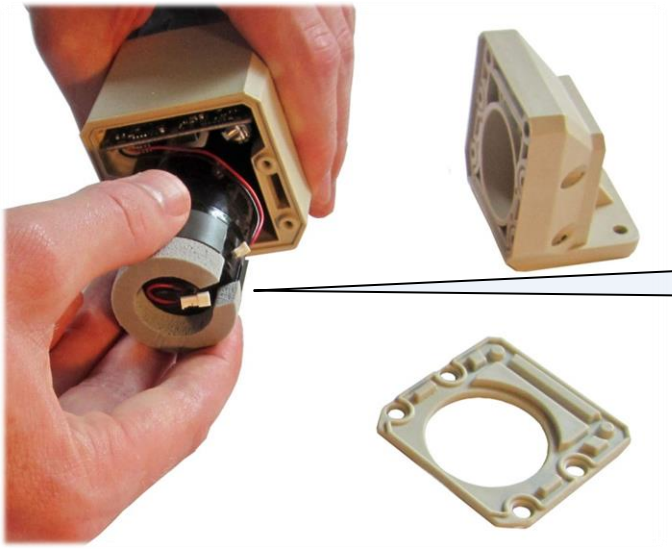
1. Use a Phillips screwdriver to remove the four battery cap screws and set aside.
2. Remove the battery cap and set aside.



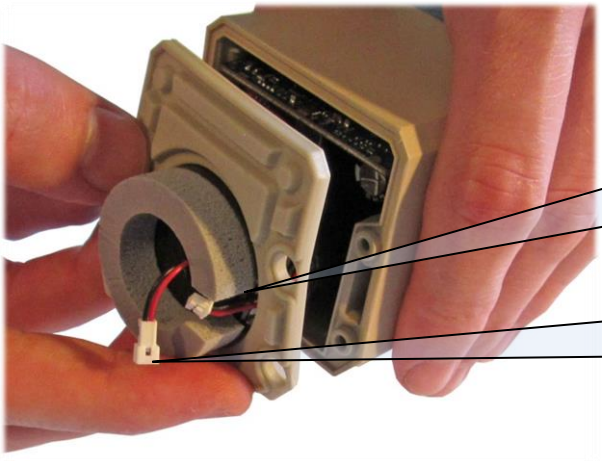
3. Remove the rubber gasket, being careful to align the gap in the battery pack foam with the power cable, and set aside.
4. Disconnect the red and black power cable by pulling the two white connector halves apart (do NOT pull the power wires).



5. The power cable is disconnected. The four battery cap screws, rubber gasket, and battery cap are set aside.



6. Slide the battery pack out of the Qtanium 100.



7. Slide in the replacement battery pack.

8. Replace the rubber gasket, being careful to align the gap in the battery pack foam with the power cable.

9. Reconnect the power cable.

10. Replace the battery cap then use the Phillips screwdriver to hand-tighten the four battery cap screws.

This completes the Qtanium 100 battery replacement procedure.

6 Specifications

Physical

- Weight: 907g (32 oz)
- Dimensions: 55 x 55 x 260 mm (2.25 x 2.25 x 10.5")

General Specifications

- Communication modes: GPRS/EDGE/HSPA and CDMA 1xRTT packet data, UDP and SMS
- Location technology: 50 channel GPS
- Operating voltage: 3.6 V
- Internal cellular and GPS antennas
- IP67 sealed and ruggedized enclosure

Internal Battery Specifications

- Capacity: 57 amp hour
- Technology: Lithium
- Replaceable battery pack

Power Consumption

- Deep sleep: 1 mA
- Sleep on network: 10 mA
- Active standby: 70 mA

Certifications

- FCC
- CE
- IC
- PTCRB
- Applicable carriers

Environmental

- Storage Temperature: -40 to +85° C (-40 to +185° F)
- Operational Temperature: -30 to +75° C (-32 to +167° F)
- Humidity: 95%RH @ 50° C non-condensing
- Shock & vibration: U.S. Military Standards 202G and 810F, SAE j1455
- EMC/EMI: SAE J113; FCC – part 15B; Industry Canada
- RoHS Complaint

7 Contacts

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